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11430 U.S. PTO

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PTO/SB/05 (03-01)

Approved for use through 10/31/2002 OMB 0651-0032

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	D-2737/WOD
First Inventor	VanderZee, J. C. et al
Title	Determination and Applications of Three-Phase Power Factor
Express Mail Label No.	ET320402885US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. Fee Transmittal Form (e.g., PTO/SB/17) *(Submit an original and a duplicate for fee processing)*
2. Applicant claims small entity status. See 37 CFR 1.27.
3. Specification [Total Pages 31]
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. Drawing(s) (35 U.S.C. 113) [Total Sheets 4]
5. Oath or Declaration [Total Pages 35]
 - a. Newly executed (original or copy)
 - b. Copy from a prior application (37 CFR 1.63 (d)) *(for continuation/divisional with Box 18 completed)*
 - i. **DELETION OF INVENTOR(S)**
 Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b)
6. Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
 - a. Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. CD-ROM or CD-R (2 copies); or
 - ii. paper
 - c. Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. Assignment Papers (cover sheet & document(s))
10. 37 CFR 3.73(b) Statement Power of *(when there is an assignee)* Attorney
11. English Translation Document *(if applicable)*
12. Information Disclosure Statement (IDS)/PTO-1449 Copies of IDS Citations
13. Preliminary Amendment
14. Return Receipt Postcard (MPEP 503) *(Should be specifically itemized)*
15. Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

Continuation Divisional Continuation-in-part (CIP) of prior application No. /

Prior application information Examiner Group Art Unit

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

<input type="checkbox"/> Customer Number or Bar Code Label	(Insert Customer No. or Attach bar code label here)			<input type="checkbox"/> Correspondence address below
Name	William O'Driscoll - 12-1			
Address	The Trane Company			
	3600 Pammel Creek Road			
City	La Crosse	State	WI	Zip Code
Country	United States	Telephone	608-787-2538	Fax
Name (Print/Type)	William O'Driscoll	Registration No. (Attorney/Agent)	33,294	
Signature	William O'Driscoll	Date	10/15/01	

Burden Hour Statement This form is estimated to take 0 2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

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FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision

TOTAL AMOUNT OF PAYMENT (\$ 1260.00)

Complete if Known

Application Number	
Filing Date	
First Named Inventor	VanderZee, J. C. et al.
Examiner Name	
Group Art Unit	
Attorney Docket No.	D-2737/WOD

METHOD OF PAYMENT

1. The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number **20-1434**
Deposit Account Name **The Trane Company**

Charge Any Additional Fee Required
Under 37 CFR 1.16 and 1.17

Applicant claims small entity status
See 37 CFR 1.27

2. Payment Enclosed:

Check Credit card Money Order Other

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Fee Code	Large Entity Fee (\$)	Small Entity Fee (\$)	Fee Description	Fee Paid
105	130	205	65 Surcharge - late filing fee or oath	
127	50	227	25 Surcharge - late provisional filing fee or cover sheet	
139	130	139	130 Non-English specification	
147	2,520	147	2,520 For filing a request for ex parte reexamination	
112	920*	112	920* Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840* Requesting publication of SIR after Examiner action	
115	110	215	55 Extension for reply within first month	
116	400	216	200 Extension for reply within second month	
117	920	217	460 Extension for reply within third month	
118	1,440	218	720 Extension for reply within fourth month	
128	1,960	228	980 Extension for reply within fifth month	
119	320	219	160 Notice of Appeal	
120	320	220	160 Filing a brief in support of an appeal	
121	280	221	140 Request for oral hearing	
138	1,510	136	1,510 Petition to institute a public use proceeding	
140	110	240	55 Petition to revive - unavoidable	
141	1,280	241	640 Petition to revive - unintentional	
142	1,280	242	640 Utility issue fee (or reissue)	
143	460	243	230 Design issue fee	
144	620	244	310 Plant issue fee	
122	130	122	130 Petitions to the Commissioner	
123	50	123	50 Processing fee under 37 CFR 1.17(q)	
126	180	126	180 Submission of Information Disclosure Stmt	
581	40	581	40 Recording each patent assignment per property (times number of properties)	40
146	740	246	370 Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370 For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370 Request for Continued Examination (RCE)	
169	900	169	900 Request for expedited examination of a design application	
Other fee (specify) _____				

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee	Small Entity Fee	Fee Description	Fee Paid
Code (\$)	Code (\$)		
101	740	201	370 Utility filing fee
106	330	206	165 Design filing fee
107	510	207	255 Plant filing fee
108	740	208	370 Reissue filing fee
114	160	214	80 Provisional filing fee
SUBTOTAL (1) (\$ 740)			

2. EXTRA CLAIM FEES

Extra Claims	Fee from below	Fee Paid
42	-20** = 22 X 18 = 396	
4	- 3** = 1 X 84 = 84	

Large Entity Small Entity

Fee Code (\$)	Large Entity Fee	Small Entity Fee	Fee Description
103	18	203	9 Claims in excess of 20
102	84	202	42 Independent claims in excess of 3
104	280	204	140 Multiple dependent claim, if not paid
109	84	209	42 ** Reissue independent claims over original patent
110	18	210	9 ** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2) (\$ 480)			

*or number previously paid, if greater. For Reissues, see above

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 40)

SUBMITTED BY		Complete if applicable		
Name (Print/Type)	William O'Driscoll	Registration No. (Attorney/Agent)	33,294	Telephone
Signature	William O'Driscoll			608-787-2538
		Date	10/14/01	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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MULTIPLE DEPENDENT CLAIM FEE CALCULATION SHEET (For use with Form PTO/SB/06)							Application Number		Filing Date	
							Applicant(s) VanderZee, J. C. et al.			
							* May be used for additional claims or amendments			
CLAIMS	AS FILED		AFTER FIRST AMENDMENT		AFTER SECOND AMENDMENT		* Indep	* Depend	* Indep	* Depend
	Indep	Depend	Indep	Depend	Indep	Depend				
1	Ind.						51			
2			1				52			
3			1				53			
4			3				54			
5			4				55			
6			3				56			
7			6				57			
8			1				58			
9			8				59			
10			9				60			
11			8				61			
12			11				62			
13			1				63			
14			13				64			
15			13				65			
16			1				66			
17			16				67			
18			17				68			
19			18				69			
20	Ind.						70			
21			20				71			
22			20				72			
23			22				73			
24			23				74			
25			22				75			
26			25				76			
27			20				77			
28			27				78			
29			28				79			
30			27				80			
31			30				81			
32			20				82			
33			32				83			
34			32				84			
35			20				85			
36			35				86			
37			36				87			
38			37				88			
39	Ind.						89			
40			39				90			
41	Ind.						91			
42			41				92			
43							93			
44							94			
45							95			
46							96			
47							97			
48							98			
49							99			
50							100			
Total Indep	4						Total Indep			
Total Depend	38						Total Depend			
Total Claims	42						Total Claims			

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE PATENT APPLICATION OF:

Joel C. Vanderzee, Michael W. Murry,
Richard L. Vogel and Matthew A. Shepeck

U.S. SERIAL NO: UNKNOWN

GROUP: UNKNOWN

FILED: CONCURRENTLY

EXAMINER: UNKNOWN

FOR: DETERMINATION AND APPLICATIONS OF
THREE-PHASE POWER FACTOR

La Crosse, Wisconsin
October 11, 2001

CERTIFICATE OF MAILING BY EXPRESS MAIL

UNDER 37 C.F.R. 1.10

Assistant Commissioner for Patents

Washington, D.C. 20231

Dear Sir:

I hereby certify that the attached "Patent Application" is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on October 11, 2001, and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231. The number of the Express Mailing label is ET320402885US.

Respectfully Submitted,

William O'Driscoll

William O'Driscoll
Registration No. 33,294

Telephone Number: (608) 787-2538